CUSTOMER NO.
34456

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend the claims as follows:

1. (Currently amended) A method to synchronize transmission of ~~a plurality of~~ data ~~between a first source device and a destination device~~, said method comprising:

~~transmitting said plurality of data in a first frequency band from said first source device;~~

receiving ~~said~~ a plurality of data into a buffer at ~~said~~ a destination device, wherein the plurality of data is transmitted by a first source device via a first network;

~~transmitting a plurality of synchronization pulses in a second frequency band from a second source device, wherein said second frequency band is substantially different from said first frequency band;~~

receiving ~~said~~ a plurality of synchronization pulses at said destination device, wherein the plurality of synchronization pulses is transmitted by a second source device via a second network ; and

receiving a sequence number at said destination device to determine when said destination device will access said plurality of data from said buffer.

2. (Currently amended) The method of claim 1, further comprising extracting ~~a~~ the sequence number from said plurality of synchronization pulses received by said destination device to determine when and in which order said destination device will access said plurality of data from said buffer.

3. (Currently amended) The method of claim 1, wherein ~~said first source device and said destination device are connected in a~~ the first network ~~by~~ is a power line network and the second network is a data network.

4. (Cancelled)

5. (Cancelled)

6. (Original) The method of claim 1, wherein said first source device and said second source device are the same device.

7. (Original) The method of claim 1, wherein said plurality of synchronization pulses adjusts a clock signal used by said destination device.

8. (Original) The method of claim 7, wherein said plurality of synchronization pulses adjusts a phase-locked-loop (PLL) in said destination device.

9. (Original) The method of claim 1, wherein said plurality of synchronization pulses is transmitted to said destination device by a transmission media selected from a group consisting of: a pair of wires, a double pair of wires, a coaxial cable, radio transmission, infrared transmission, one optical fiber, and two optical fibers.

10. (Original) The method of claim 1, wherein said plurality of synchronization pulses and said plurality of data are transmitted using one modulation method.

11. (Previously presented) The method of claim 10, wherein said plurality of synchronization pulses and said plurality of data are transmitted using orthogonal differential frequency (ODFM) modulation.

12. (Previously presented) The method of claim 10, wherein said plurality of synchronization pulses and said plurality of data are transmitted using a modulation method selected from a group of modulation methods consisting of: QAM, CODFM. DFM, PSK, BPSK, or QPSK.

13. (Original) The method of claim 1, wherein said plurality of synchronization pulses is transmitted with a different modulation from a modulation used to transmit said plurality of data.

14. (Original) The method of claim 1, wherein said plurality of synchronization pulses is transmitted without modulation.

15. (Original) The method of claim 1, wherein said plurality of data has an embedded sequence number.

16. (Original) The method of claim 1, further comprising receiving said plurality of synchronization pulses by a global positioning satellite (GPS) receiver in said destination device.

17. (Currently Amended) The method of claim 1, wherein said plurality of data includes audio data, video data, multimedia data, or a combination thereof.

18. (Currently Amended) A method to ~~deterministically~~ transmit ~~a plurality of~~ data ~~between a first source device and a destination device~~, said method comprising:

transmitting ~~said~~ a plurality of data ~~in a first frequency band~~ from ~~said~~ a first source device into a buffer at a destination device via a first network;

~~receiving said plurality of data into a buffer at said destination device;~~

~~transmitting~~ wherein the destination device receives a plurality of synchronization pulses ~~in a second frequency band~~ from a second source device~~, wherein said second frequency band is substantially different from said first frequency band~~ via a second network;

~~receiving said plurality of synchronization pulses at said destination device,~~ wherein said plurality of synchronization pulses adjusts a local clock in said destination device; and

~~extracting~~ wherein the destination device extracts a sequence number from said plurality of synchronization pulses ~~received by said destination device~~ to determine when and in which order ~~said destination device will~~ to access said plurality of data from said buffer.

19. (Currently Amended) The method of claim 18, wherein ~~said first source device and said destination device are connected in a~~ the first network ~~by~~ is a power line network and the second network is a wireless network.

20. (Original) The method of claim 18, wherein said first source device and said second source device are the same device.

21. (Cancelled)

22. (Cancelled)

23. (Original) The method of claim 18, wherein said plurality of synchronization pulses and said plurality of data are transmitted using one modulation method.

24. (Original) The method of claim 18, wherein said plurality of synchronization pulses is transmitted with a different modulation from a modulation used to transmit said plurality of data.

25. (Original) The method of claim 18, wherein said plurality of synchronization pulses is transmitted without modulation.

26. (Original) The method of claim 18, wherein said plurality of data has an embedded sequence number, which said destination device can extract to determine when to access said plurality of data from said buffer.

27. (Currently Amended) A ~~deterministic network to synchronize transmission of a plurality of~~ data ~~between a first source device and a destination device, said deterministic network~~ system, comprising:

~~a first source device to transmit said plurality of data;~~

~~a second source device to transmit a plurality of synchronization pulses;~~

~~a destination device to receive said plurality of synchronization pulses, including a buffer to receive said plurality of data, and a controller to calculate a sequence number to determine when said controller will access said plurality of data from said buffer;~~

~~a first transmission medium to transmit said plurality of data in a first frequency band from said first source device to said destination device; and~~

~~a second transmission medium to transmit said plurality of synchronization pulses in a second frequency band from said second source device to said destination device, wherein said second frequency band is substantially different from said first frequency band.~~

a destination device having a buffer and a controller, wherein the destination device receives a plurality of data from a first source device to be stored in the buffer and receives a plurality of synchronization pulses from a second source device that is physically separate from the first source device;

wherein the controller is configured to calculate a sequence number to determine when the controller accesses the plurality of data from the buffer;

wherein the destination device is configured to receive the plurality of data from the first source device via a first transmission medium of a first network; and

wherein the destination device is configured to receive the synchronization pulses from the second source device via a second transmission medium of a second network.

28. (Currently Amended) The ~~network~~ system of claim 27, wherein said destination device determines said sequence number from said plurality of synchronization pulses.

29. (Currently Amended) The ~~network~~ system of claim 27, wherein said first transmission medium and said second transmission medium are the same transmission medium.

30. (Currently Amended) The ~~network~~ system of claim 27, wherein said first source device and said destination device are connected in a network by a power line.

31. (Currently Amended) The ~~network~~ system of claim 27, wherein said first source device and said second source device are the same device.

32. (Cancelled)

33. (Cancelled)

34. (Currently Amended) The ~~network~~ system of claim 27, wherein said plurality of synchronization pulses adjusts a clock signal used by said destination device.

35. (Currently Amended) The ~~network~~ system of claim 34, wherein said plurality of synchronization pulses adjusts a phase-locked-loop (PLL) in said destination device.

36. (Currently Amended) The ~~network~~ system of claim 27, wherein said plurality of synchronization pulses is transmitted to said destination device by a transmission media selected from a group consisting of: a pair of wires, a double pair of wires, a coaxial cable, radio transmission, infrared transmission, one optical fiber, and two optical fibers.

37. (Currently Amended) The ~~network~~ system of claim 27, wherein said plurality of synchronization pulses and said plurality of data are transmitted using the same modulation method.

38. (Currently Amended) The ~~network~~ system of claim 37, wherein said plurality of synchronization pulses and said plurality of multimedia data are transmitted using orthogonal differential frequency (ODFM) modulation.

39. (Currently Amended) The ~~network~~ system of claim 37, wherein said plurality of synchronization pulses and said plurality of multimedia data are transmitted using a modulation method selected from a group of modulation methods consisting of: QAM, CODFM, DFM, PSK. BPSK, or QPSK.

40. (Currently Amended) The ~~network~~ system of claim 27, wherein said plurality of synchronization pulses is transmitted with a different modulation from a modulation used to transmit said plurality of data.

41. (Currently Amended) The ~~network~~ system of claim 27, wherein said plurality of synchronization pulses is transmitted without modulation.

42. (Currently Amended) The ~~network~~ system of claim 27, wherein said plurality of data has an embedded sequence number.

43. (Currently Amended) The ~~network~~ system of claim 27, wherein said destination device comprises a global positioning satellite (GPS) receiver receiving said plurality of synchronization pulses.

44. (Currently Amended) The ~~network~~ system of claim 27, further comprising an error detection circuit in said destination device.

45. (Currently Amended) The ~~network~~ system of claim 27, wherein said plurality of data includes audio data.

46. (Currently Amended) The ~~network~~ system of claim 27, wherein said plurality of data includes video data.

47. (Currently Amended) The ~~network~~ system of claim 27, wherein ~~said first transmission medium and said second transmission medium comprise a communication network,~~ said first source device comprises a first audio controller and said second source device comprise ~~an~~ a second audio controller, and said destination device comprises one or more speakers ~~coupled to said communication network~~.

48. (Currently Amended) The ~~network~~ system of claim 27, wherein said destination device further includes one or more demodulators demodulating said plurality of data and said plurality of synchronization pulses.

49. (Currently Amended) The ~~network~~ system of claim 27, wherein said destination device further includes a detector extracting said sequence number from said plurality of synchronization pulses.

50. (Currently Amended) A computer-implemented method for synchronizing transmission of ~~a plurality of~~ data ~~between a source device and one or more destination devices~~, the method comprising:

receiving a plurality of data transmitted from ~~said~~ a source device ~~at a first frequency band~~ via a first network;

subsequently receiving a plurality of synchronization pulses transmitted from said source device ~~at a second frequency band, wherein said second frequency band is substantially different from said first frequency band~~ via a second network;

adjusting a clock local to each of ~~said~~ one or more destination devices in response to said plurality of synchronization pulses ~~received~~;

~~determining~~ extracting a sequence number ~~extracted~~ from said plurality of synchronization pulses; and

invoking each of said one or more destination devices to access said plurality of data according to said sequence number.

51. (Currently Amended) A computer program product for synchronizing transmission of ~~a plurality of~~ data ~~between a source device and one or more destination devices~~, wherein said computer program product is stored on a computer readable medium and adapted to perform operations of:

receiving ~~said~~ a plurality of data transmitted from ~~said~~ a source device ~~at a first frequency band~~ via a first network;

subsequently receiving a plurality of synchronization pulses transmitted from said source device ~~at a second frequency band, wherein said second frequency band is substantially different from said first frequency band~~ via a second network;

adjusting a clock local to each of ~~said~~ one or more destination devices in response to said plurality of synchronization pulses ~~received~~;

~~determining~~ extracting a sequence number ~~extracted~~ from said plurality of synchronization pulses; and

invoking each of said one or more destination devices to access said plurality of data according to said sequence number.

52. (Cancelled)

53. (Original) The computer program product of claim 51, wherein at least one of said one or more destination devices comprises a phase-locked-loop (PLL) and said plurality of synchronization pulses adjusts said PLL.

54. (Currently Amended) The computer program product of claim 51, wherein said plurality of data is selected from a group consisting of audio data, visual data, ~~and audio-visual data~~ multimedia data, or a combination thereof.

55. (New) The method of Claim 1, wherein the first network is a wireless network and the second network is a power line network.

56. (New) The method of claim 1, wherein said first source device and said second source device are physically separate devices.

57. (New) The method of claim 3, wherein the data network is a wireless network.

58. (New) The method of Claim 18, wherein the first network is a wireless network and the second network is a power line network.